

IN THE CLAIMS:

The following listing of the claims supersedes all previous listings:

1. (Previously presented) A simulation game system, integrating geographical information provided by a geographical information system for forming a game background and creating game course interaction, the system comprising:

a manipulation displaying module, displaying a game background according to a move signal generated by a manipulating action, and operating a game course according to a trigger signal generated by another manipulating action;

a logic computing module, receiving a move signal and performing logic computing of a character coordinate data and a corresponding display area respectively, and further receiving a trigger signal and performing logic computing of a corresponding event coordinate data;

a geographical information system, providing map layer data according to the display area and performing geographical information analysis corresponding to the event coordinate data, wherein the geographical information system further comprises:

a geographical information database, storing the map layer data corresponding to the display area and the geographical information corresponding to the event coordinate data;

a game database, storing a plurality of game course sequences corresponding to the event coordinate data, and a plurality of background object data corresponding to the display area; and

a background generator module, receiving the map layer data to perform overlay computing and generate the game background, and further executing a game course sequence according to event coordinate data.

2. (Previously presented) The simulation game system of claim 1, wherein the map layer data comprises at least a vector layer data and a grid layer data.

3. (Previously presented) The simulation game system of claim 1, wherein the geographical information analysis comprises at least one of a buffer zone analysis, a route analysis, a space topology analysis, a slope inclination analysis, a 3-dimensions view analysis, or a tendency forecast analysis.

4. (Original) The simulation game system of claim 1, wherein the display area is a maximal visible area from the character coordinate data.

5. (Previously presented) A simulation game method, integrating geographical information provided by a Geographical Information System for forming a game background and creating game course interaction, the method

comprising:

detecting a move signal and computing and creating a game character coordinate data;

transmitting a display area corresponding to the game character coordinate data and accessing a map layer data;

according to coordinates of the display area and a vector layer data, performing a first map overlay computing;

according to coordinates of the display area and a grid layer data, performing a second map overlay computing;

reading a background objects data in the display area and forming a game background; and displaying in real-time the game background.

6. (Previously presented) The simulation game method of claim 5, wherein the map layer data comprises at least a vector layer data and a grid layer data.

7. (Original) The simulation game method of claim 5, wherein the display area is a maximal visible area from the character coordinate data.

8. (Original) A simulation game method, integrating geographical information provided by a Geographical Information System for forming a game background and creating game course interaction, the method comprising:

detecting a trigger signal and generating corresponding event coordinate data;

transmitting the event coordinate data corresponding to the trigger signal;

if the event coordinate data correspond to a geographical information event, returning geographical information corresponding to the event coordinate data via the geographical information system; and performing a display update.

9. (Original) The simulation game method of claim 8, further comprising reading and executing a preset game course sequence corresponding to the event coordinate data when the event coordinate data correspond to a game course event.

10. (Previously presented) The simulation game method of claim 8, returning geographical information corresponding to the event coordinate data via the geographical information system further comprises performing a geographical information analysis, wherein the geographical information analysis includes at least one of a buffer zone analysis, a route analysis, a space topology analysis, a slope inclination analysis, a 3-dimensions view analysis, or a tendency forecast analysis.